

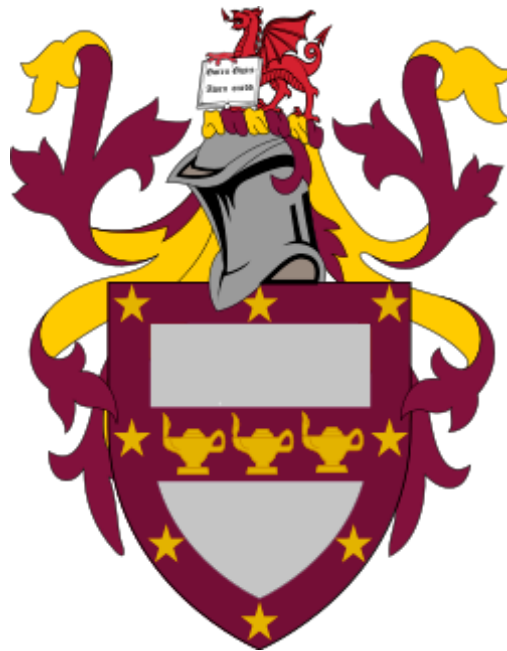
Spanning the Immersive Field

by

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I have observed that when my dog Ryder is presented with new stimulus he pricks up his ears, cocks his head on an angle, and looks longingly in the direction of the stimulus even while steeling himself to respond quickly to any eventuality. It is basically the response which the Post-Pavlovian Russian physiologists and psychologists of the 1960s called the "orientation reaction" (Lynn) and I think it is permissible to say that this state of cautious longing has become emblematic of consciousness in cyberspace. In this sense we are living in what might be called the "orientational age", as we attempt daily to orient ourselves in the span of the expanded immersive electronic field.

Certainly it is true that hidden in us and in connected computer-space there is something so abstract, so large, so astounding, and so pregnant with the darkness of infinite space that it excites and frightens us and thus returns us to the experimental and to a state of stimulating abstract desire and restlessness. In one sense we artists are prepared for this state better than most in that the history of abstract art has shown us that consciousness may refuse to recognize all thought as existing in the space of compressed representation, and by scanning the space of representation it may formulate the knowledge of the laws that provide its de-compressed organization. (Rosenthal)

With an abstract comprehension of the orientational age, art theory itself needs to take on a new sense of de-compressed spirit and redefine itself from the omni-perspective view found in immersive cyberspace. It is neither surprising nor coincidental that an epistemological change in art theory would follow connectionist developments inherent in hyper-media as the immense perspective of connected computer-space requires us to question the legitimacy of commonly held beliefs and the forgone conclusions established concerning the theoretical issues of sexual politics, multiculturalism, gender studies, and the far-reaching heterogeneous philosophical critique of the cultural mechanisms of representation which have preceded it. The desire to theorize this sense of the infinite and the spectacular has lead me to a field of theoretical interests that I am amassing under the rubric of "orientational span theory": a connectionist theory which is everywhere, all the time, all at once.

It is a well worn cliché by now that we live in the era of information overload - hence a connectionist theory which purports to attempt a span of the extended virtual-field presupposes we have reached an orientational level of symbol density and we are now able to combine many individual symbols into complex relationships, or chunks, of information which can then be treated as single mega symbols. (Nechvatal) However, since it is impossible to make sense of today's swirling phantasmagorical stimulus, the general proposition behind a theory which spans may best be to look for an omnijective summation of this uncertainty and to take advantage of today's knowledge saturation and its overall sense of ripe delirium, as theories of all kinds pulse with higher and higher flows of data to

the point of near hysteria. (Kroker) Omnijectivity is the metaphysical concept introduced by David Bohm in *The Undivided Universe: an Ontological Interpretation of Quantum Theory* which stems from the discoveries of quantum physics. Bohm points out that quantum physics teaches us that mind (previously considered the subjective realm) and matter (previously considered as the objective realm) are inextricably linked in omnipresence, thus they should be merged into the single term of omnijectivity. In my view, it is orientational span theory's job to find out what unconventional connectionist sense, in terms of omnijectivity, this uncertainty might make to us, and to see how blocks of the chaos of information might start to sympathetically vibrate with each other based on a decadent reading of our electronic media environment. (Kuspit)

In this sense orientational span theory is compatible with and comparable to chaos theory, the contemporary theory which stems from physics, biology and mathematics which is closely associated with poststructuralist theory. (Harland) While classical sciences isolated physical systems from their surrounding, chaos theory is founded on the realization that all systems in nature are connected and subject to flows of matter and energy which move constantly through them. (Waldrop)

An orientational spanning theory cognizant of the same principles of connectivity would begin with the presumption that the theory bomb has exploded, showering us with bits of theory shrapnel, drastically changing the way in which we perceive and act, even in our private dream worlds. This realization may lead us back to Michel Foucault's analysis of Raymond Roussel's Fin-de-Siècle invention of dreamy language machines that produced texts through the use of repetitions and combination-permutations, as a dream-like and machine-like logic provided Roussel's writing with a seemingly endless variety of textual combinations flowing in circular form. (Foucault, 1986)

As described in Foucault's book *Raymond Roussel: Death and the Labyrinth*, Roussel's technique and its process of endless development lends itself well to the creation of unforeseen, automatic and spontaneously inventive theories which give the reader a feeling of being pulled into the span of eternity through the ceaseless constructions of theory itself,

transmitting an altered and exalted state of mind to the reader as it systematically imposes a formless anxiety through its labyrinthine extensions, doublings, disguises and duplications.

Most salient to an orientational span theory would be Foucault's analysis of Roussel's final book, *How I Wrote Certain of My Books*, which contains and repeats within its mechanism all the mental-machines he had formerly described and put into motion, and by doing so making evident the master-machine which produced all of his previous text-machines. Hence Roussel presents to us a model of theoretical perfection: a theory machine which functions independently of time and space, pulling theory into a developmental logic of the infinite. Hoist by it's own petard.

It is this internal logic of the infinite and its tragic drama which I find potentially interesting for an orientational spanning theory for it must be remembered that electronic theory itself resides in a field of virtual immersive perceptions at once seamless and fragmented which is made up of electronic energies corresponding to the new combination of space and time, a spherical, omnijective, and immersive perspective without horizon.

Thus orientational span theory functions best as an osmotic membrane, a blotter of ubiquity resulting in the atomization and disintegration of normal information and data. And in this sense it is reasonable for an orientational span theory to make use of the holonogic schematic model of Arthur Koestler in that no set or frame of perceptions may be viewed in isolation or as a single part of a finite perceptual collection within synthetic holonogic models. According to Koestler's *holon* concept (established in *Beyond Reductionism* (Koestler, 1971, pp. 192-232) and in *The Ghost in the Machine* (Koestler, 1967, pp. 45-58)) instead of cutting up immersive perceptual wholes into discrete focal parts, theory should be conducted using synthetic sub-whole sets found within the ambient atmospheric spectrum of theory's entirety. Tim McFadden in his text "Notes on the Structure of Cyberspace and the Ballistic Actors Model" in Michael Benedikt's *Cyberspace: The First Steps* (Benedikt, 1991, pp. 335-362) adapted the concept of the holon's ambiguous relationships in the early-1990s as a model for understanding the configuration of cyberspace in that holons, like cyberspace, have both cohesion and separateness as their

structural elements. (McFadden) This merges theory into its proper network of circulation, demystifying the ideology of its reproduction and intervening in its system of cultural interpretations.

Whereas pre-orientational span theory is made up of conventional, rigid, social representations, orientational span theory makes use of the abstract potential of the connected, all-encompassing sign-field, thus it is unconventional, and therefore demonstrative of the real arbitrary nature of all representations, as we learned from Michel Foucault's *The Order of Things*. Hence orientational span theory may offer us the opportunity for the creation of relevant and applicable anti-social theories (abstract, ecstatic, and/or antiseptic) which may continue to move and multiply. Orientational span theory then opens thought up to new spaces of malleable and combinatory sites (hence a perpetual multiplication of significance). It does so by creating a hybrid of meaning and personal inference, thereby opening up an omnijective territory of signification in which we connect and create a chain of decoded and deterritorialized meanings into new mega symbols. Meaning in art and in life then advances by seeing more clearly into its own underlying assumptions of superfluity, by facing up to the radical implications of those assumptions, and by purging itself from conventional ways of thinking by making no recourse to imagined exterior principles or a priori assumptions.

May I just say that this escape from representational theory has the most urgent political/social ramifications in our media society. Thus span theory's, I think, well founded but ambiguous urge for epistemological reconfiguration based on the capacity of connected electronic media's immeasurable (and ultimately homogenous) intermixtures, provides the definition of the links that abet communications while also expressing the laws of composition and decomposition that administer it. Hence orientational span theory can be, in a sense, the abstract theory of all representations when it attempts to orient itself in the unlimited field of representation, which utilitarian ideology attempts to scrutinize in accordance with a step-by-step, discursive method but which now appears as an abstract digital metaphysics, but a metaphysics which abstraction helps to step outside of itself. Thus perhaps its unconscious intention is to achieve an ultimate integration of

consciousness by the dissolving of theory into its original unmanifested ground (symbolic of stark unconsciousness) and of infinite complexity in unity. This dynamic interdependence of electronic forms of thought in contemplative vision represents the ultimate in re-configuration, one that subsumes our world of simulation/representation into a nexus of over-lapping unity of mind which equals an understanding of the unity which ties the whole universe into a single entity, linking observations of the outer world with precise extractions of human essence. This imploded view of theory, brought to a certain sense of pliability, offers us a double prospect: first, the solipsistic images of theoretical excess, and then, as in a psychedelic glamour, in the reverberant structure of the unfolding total-theory-work. (Bruner)

Undoubtedly, totaling analogies often in the past have been unequivocal in their urge towards perfectification; embellished, as they seem to must be, with a sort of self-significance and, often, fallacious universalism. This question is at the hub of this quest and it beckons forth the question of what models do we make for ourselves, which do we prefer aesthetically, and why? As we daily self-model our own consciousness (and being) into a totalized unit, as Churchland has established, when occupied with questions of assiduous artistic and philosophical theorizing, it must be remembered that our abstract and ideal concepts adhere to our neurological unified configuration. Consciousness models itself as a whole. (Churchland) All explanations which function in terms of some united principle or explanatory device exhibit this knowledge.

This assertion on my part concerning theoretical consciousness as possibly being multiple and unified simultaneously has received some external support from Michio Kaku and Jennifer Thompson in their recently revised edition of *Beyond Einstein* in which they purport to have attained the (or an) elusive unified field theory which explains the universe as a totality, a problem which escaped Einstein after all his best efforts and those that followed him. Their theory is labeled "the theory of superstrings" and it, similar to the way I proposed the degrees of multiple/unified frequencies interact towards unified ends (Kaku & Thompson) in orientational span theory, combines into an all-inclusive private picture

the segregated forces and particles through sympathetic vibration, just as the strings of a piano do, especially when tuned to the system called "just intonation".

If what I have said sounds metaphysical, it is metaphysical only in so far as it is memory, intensity, and stratosphere all working together in making up an internal model of the self. If in cyberspace our epistemologies are adrift via how objectivity was once understood, orientational span theory's central mission is in addressing information now as a personalized omnijective mega symbol. Hence orientational span theory is non-linear, yet it displays long-term tendencies and organizational patterns and principle of becoming in and through constant mutation. It is a principle of intermingling micro-relations in an ongoing processes of macro-relations. Therefore it theorizes principles of transversality and of contaminations within the personal obsessions of the individual, as we saw with Roussel. It theorizes principles of linkages, of connectivity, and of the intersection of all preceding theories, giving rise to theoretical production and creativity.

References:

- Bohm, D. 1993. *The Undivided Universe: an Ontological Interpretation of Quantum Theory*. London: Routledge
- Bruner, J. 1973. *Beyond the Information Given: Studies in the Psychology of Knowing*. New York: Norton
- Churchland, P. 1986. *Neurophilosophy: Toward a Unified Science of the Mind/Brain*. Cambridge, Mass.: MIT Press
- Foucault, M. 1970. *The Order of Things*. London: Tavistock
- Foucault, M. 1986. *Raymond Roussel: Death and the Labyrinth*. New York: Double Day
- Harland, R. 1987. *Superstructuralism: The Philosophy of Structuralism and Post-Structuralism*. London: Methuen
- Kaku, M. and Thompson, J. 1997. *Beyond Einstein*. New York: Oxford University Press
- Koestler, A. 1971. "Beyond Atomism and Holism: The Concept of the Holon" In Koestler, A. and Smythies, J. R. eds. 1971. *Beyond Reductionism*. pp. 192-232
- Koestler, A. 1967. *The Ghost in the Machine*. New York: Hutchinson, London and Macmillan
- Kroker, A. 1993. *The Possessed Individual*. New York: Simon and Schuster
- Kuspit, D. 1993. *The Dialectic of Decadence*. New York: Stux Press
- Lynn, R. 1966. *Attention, Arousal and the Orientation Reaction*. Oxford: Pergamon Press
- McFadden, T. "Notes on the Structure of Cyberspace and the Ballistic Actors Model" in Benedikt, M. ed. 1991. *Cyberspace: The First Steps*. Boston: MIT Press, pp. 335-362
- Nechvatal, Joseph. "The Art of Excess in the Techno-Mediocratic Society" in *New Observations* No. 94. Guest edited by Nechvatal, Joseph. 1993.
- Rosenthal, M. 1996. *Abstraction in the Twentieth Century: Total Risk, Freedom, Discipline*. New York: Guggenheim Museum
- Waldrop, M. 1992. *Complexity: The Emerging Science at the Edge of Order and Chaos*. New York: Simon and Schuster